



# **INTERNATIONAL STANDARDS ORGANIZATION TECHNICAL COMMITTEE TCS (SHIPS & MARINE TECHNOLOGY)**

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## **FROM THE CHAIRMAN**

Since our last newsletter, much progress has been made toward fulfilling our strategic vision. We are updating our work programme document 8N1000 on a regular basis and in our latest version we have 74 items that are IMO related. Our publicity has greatly expanded with numerous articles being published about ISO/TC8 activities. ISO/TC8 has 150 published standards and 202 work items. We continue to meet with our Advisory Group every six months with a full plenary meeting yearly. Activity is at an all time high! Our relationship with CEN is excellent. Now we must extend our collaboration to include other major regional bodies, such as COPANT and PASC.

The pilot project on use of e-mail has been worthwhile. We are moving forward in electronic communications and everyone is encouraged to join the e-mail approach. We can rapidly communicate and exchange ideas. Since everyone is being asked "to do more with less", this approach assists by reducing administrative burdens while providing information quicker. ISO/TC8's web page (courtesy of Howard Hime, USA) is outstanding. It is current and impressive. Try it at <http://www.uscg.mil/hq/g-m/nmc/standards/index.htm>.

I regret to announce that NNI has relinquished the Secretariat after 50 years of dedicated service. We thank NNI and Mr. Van Elk in particular for his outstanding service. We wish him "Fair Winds and Following Seas." Now we must continue to march forward with our new Secretariat into the 21<sup>st</sup> century.

Our future is bright as the maritime industry is truly global and the importance of International Standards in facilitating trade is well recognized and accepted.

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## **News from ISO Technical Management Board (TMB)**

Recent actions of the Board are provided below:

- **New ISO Deliverables**

Council and the TMB approved the introduction of *three new deliverables* with the designations:

- *ISO Publicly Available Specification (ISO/PAS)*,
- *ISO Technical Specification (ISO/TS)* and
- *Industry Technical Agreement (ITA)*.

ISO/PAS and ISO/TS are developed within the ISO technical structure of working groups and technical committees/subcommittees; but, due to the lower level of consensus needed for their approval, do not have the same status as International Standards. An ITA, on the other hand, represents a technical document developed by a workshop outside of the technical structure of ISO with administrative support from a designated member body.

Through the introduction of new deliverables, ISO is trying to provide an adequate answer to market needs in different technical sectors which require a more flexible and faster approach to developing technical agreements and making them available to the relevant market players at an early stage of the development of products and their introduction into markets.

It is expected that a committee wishing to develop either an ISO/PAS or an ISO/TS will make this decision at the start of a project. However, it is also possible that a normal ISO project is converted into one of the two new deliverables if it is subsequently discovered that agreement cannot be achieved quickly to produce an International Standard. Both types of documents shall be reviewed after three years with a view to their reconfirmation, withdrawal or further development into an International Standard. After six years, such document should either be processed to become an International Standard or should be withdrawn. Both types of documents may be developed in one language only.

ISO Technical Reports will in future be purely informative documents (i.e. the current type 3 technical reports). Normative technical reports (types 1 and 2) will in future be published as technical specifications.

## **News from ISO Technical Management Board (TMB)** *continued from page 1*

- **Transfer of ISO/CS responsibilities to TC/SC secretariats**

- **Preparation and issue of meeting notices and draft agendas**

The TMB decided that the convening of meetings and issue of draft agendas should be fully delegated to TC/SC secretariats. TC/SC secretariats will be responsible for convening and issuing agendas for meetings held after 31 December 1998.

- **Administration of the systematic review**

The TMB, at its meeting in June 1998, decided that as of 1 January 1999, Committee Secretariats will administer the vote for standards subject to the systematic review. A new Form 20 for the systematic review is required. It is available in electronic form from ISO's ftp site at <ftp://ftp.iso.ch/pub/out/directives/en>.

- **The TMB has agreed to the following timeframes for developing standards:**

- **Use of the ISO template**

The TMB recognized that a significant number of texts of DIS and FDIS are currently still submitted as paper copies or as electronic files which have not been prepared with the ISO template and do therefore not comply with the specification for texts to be submitted to the Central Secretariat. The TMB requested that by 1 October 1998 all texts of FDIS be submitted as electronic files prepared with the ISO template. All electronic files of DIS and FDIS have to be accompanied by a paper copy of the text because there is the possibility that automatic character substitutions will occur when files are moved between different IT-environments.

The Central Secretariat will refuse texts of DIS and FDIS if they have been submitted as paper copies only or if the files have not been prepared with the ISO template.

- **Performance approach in the development of standards**

At its last meeting, the Pacific Area Standards Congress (PASC), requested ISO to draw the attention of ISO committees to the need to develop whenever possible, performance-based standards, i.e. standards in which technical requirements are expressed in terms of performance rather than design or descriptive characteristics in order to allow the development of different technical solutions to meet the same requirements (this methodology is known as the performance approach, which is also specified in clause 5.2 of Part 2 of the ISO/IEC Directives). The TMB asks ISO committees to give this approach adequate consideration in the development of their standards.

<b>Stage</b>	<b>Time Frame</b> <i>cumulative in months since registration of the work item)</i>
Availability of the first Working Draft (stage code 20.20)	6 months
Registration of the first Committee Draft (stage code 30.00)	18 months (replaces the time frame of 24 months as defined in 2.1.5 of Part 1 of the ISO/IEC Directives)
Registration of the first FDIS (stage code 50.00)	36 months

## **Standards in Daily Life 29th World Standards Day 14 October 1998**

*Each year on 14 October the members of ISO and IEC celebrate World Standards Day, which is a means of paying tribute to the collaborative efforts made by the thousands of experts worldwide who develop the voluntary technical agreements that are published as international standards.*

Technical standardization is unlikely to cross the minds of many of us during the course of our everyday lives - yet we daily benefit from the “invisible” support of International Standards. They make so many aspects of life safer, healthier and more convenient, as well as ensuring quality and bringing us economic benefits.

To highlight this, “Standards in Daily Life” is the theme chosen for this year’s World Standards Day by the three principal organizations responsible for developing international technical standards. The leaders of the three organizations say in their joint World Standards Day message: “From the moment you wake, throughout the day, standards in some form are helping to shape your day, to make it easier, more comfortable, safer and simply more convenient.”

They give some practical examples: “Imagine, for example, not being able to withdraw money from an automated telling machine because your bank card is too big to fit in the slot; imagine batteries that will not fit any of your electrical equipment; stores without barcodes to quantify and price stocks of goods; imagine Internet sites without standardized domain names.”

The heads of ISO (International Organization for Standardization), IEC (International Electrotechnical Commission) and ITU (International Telecommunication Union) acknowledge that we do not usually think about standards - unless their absence causes inconvenience.

“In today’s world, where we expect fast, efficient communications, we demand compatibility and interoperability between electronic appliances, and we want our work tools, our consumer goods and our products to be cheap, easily available and of the best quality. International Standards are hence absolutely essential - even if most of the time they are so invisible as to be taken for granted.”

Standards, say the ISO, IEC and ITU chiefs, provide the end-user with a criterion for judgement, a measurement of quality, and a guarantee of compatibility and interoperability.

“Whether it is a standard to ensure global linking of telephone networks, a standard to ensure that life-saving medical equipment in the hospital is electromagnetically compatible, or a standard to help a company in providing a service that is quality managed and environmentally friendly, International Standards provide a veritable backbone for daily life. They encourage an improved quality of life by contributing to safety, human health and the protection of the environment.”

ISO, IEC and ITU, whose scopes of standardization complement each other, form a complete system for the supply of voluntary international technical agreements. Published as “International Standards” or “Recommendations”, these agreements are helping to bring about the compatibility of technology worldwide.

ISO, IEC and ITU leaders declare: “If machines, systems or devices work together, in many cases you have International Standards to thank for it-even if few are those that realize it.”

*(The above is reprinted from the 3 September 1998 Press Release courtesy of ISO Headquarters.)*

# NEWS FROM THE SUBCOMMITTEES

## SC1 Lifesaving and Fire Protection (USA)

A busy and productive year for SC 1 - balloting in progress for four DIS. SC 1 (Lifesaving and Fire Protection) roared into its fourth year of operation with the circulation on 13 August of four Draft International Standards for formal balloting: ISO/DIS 15370 for Low-location lighting on passenger ships, ISO/DIS 15371 for Fire extinguishing systems for protection of galley deep-frying equipment – Fire Tests, ISO/DIS 15372 for Inflatable rescue boats – Coated fabrics for inflatable chambers, and ISO/DIS 15734 for Hydrostatic release units. Several other projects are rapidly approaching fruition, most notably ISO/CD 15738 for Gas inflation systems for inflatable survival craft and marine evacuation systems which recently completed balloting for DIS status. In keeping with our mission of developing standards in support of IMO requirements, and at the request of the IMO Sub-Committee on Fire Protection (FP), ISO/DIS 15370 and ISO/DIS 15371 will be submitted to the 43rd session of the Sub-Committee, along with ISO/CD 17631 Safety plans for fire protection, life saving appliances and means of escape – Arrangement, recently completed by a well-attended meeting of WG 2 (Fire Protection) in Genoa. Our operations have been truly international, with our March 1998 plenary meeting in Baltimore agreeing to meet again in London in March 1999, and intersessional working groups meeting in Copenhagen, Lubeck (Germany), Genoa, and Hamburg. With numerous other projects still in progress, and the recent balloting of several new work items, we look forward to 1999 being another busy and productive year developing standards in support of IMO and the marine industry!

## SC 2 Marine Environment Protection (USA)

SC 2 has published a draft standard for oil spill response terminology (ISO/CD 16165). It defines common terms with technical precision, and could be adopted in the summer of 1999, according to Scott Newsham of the US Coast Guard, who is secretary to ISO TC 8/SC 2.

The glossary is the first step toward global standards for spill response. The subcommittee may issue draft standards for booms, skimmers, and universal adapters for boom connections next June. They have asked the International Maritime Organization (IMO) Marine Environment Protection Committee (MEPC) to review the draft glossary later this year. In the meantime, they seek industry comments on the draft terminology standards, based largely on standards of the American Society for Testing and Materials (ASTM). Other sources include the Oil Companies' European Organization for Environment, Health and Safety 1981 field guide to oil spill control and clean up; the 1985 American Petroleum Institute (API) guide to oil spill response, and the incident command system (ICS) glossary devised by the US National Interagency Fire Center in 1994. The USCG uses a version of that system for oil spill response.

The committee draft divides terms into broad categories such as surveillance or oil categorization. Terms involved in containment, recovery, dispersal, or in situ burning techniques are subdivided into equipment terminology, engineering terminology, and operational terminology. The glossary defines terms used in with shoreline cleaning (such as "boulder" and "pebble"), and in worker safety ("hot zone.")

A sampling of ISO's proposed definitions, from the mundane to the arcane:

**Oil:** petroleum in any form including crude oil, fuel oil, oil refuse, and refined products.

**Sheen:** very thin oil slicks with a silvery or rainbow-colored appearance, with a thickness less than 0.001 mm.

**Heavy shoreline oiling:** pooled deposits or a layer of surface oil.

**Group I (non-persistent) oil:** petroleum-based oil that consists of hydrocarbon fractions: at least 50% of which distill at a temperature of 340°C; and at least 95% of which distill at 370°C.

**Debris:** any solid or semisolid substance that could interfere with the operation of a spill control system.

**Ladder search:** aerial surveillance to find and delineate oil slicks, carried out in a direction perpendicular to the wind in order to increase the probability of locating slicks and windrows.

**Custody:** physical possession or control. A sample is under custody if it is in an individual's possession or under immediate control of some individual so as to prevent alteration of its characteristics.

**Herdling:** the collection of oil into a smaller surface area caused by surface pressure exerted by a dispersing chemical.

ISO/TC 8/SC 2 has voting members from 12 countries in Europe, Asia, and the Americas.

## SC3 Piping and Machinery (USA)

This subcommittee has 8 active working groups with 24 new work items and 4 additional possible proposals for new work items. Two items are related to propeller systems, five items are for drainage systems aboard ships, two are for identification colours of contents of piping systems, two are for test methods for fire resistance of hose assemblies, two are for drinking water supply systems aboard ships, and two are for performance of gasketed mechanical couplings and performance of fittings in those couplings. Other items are: pressure/vacuum valves for cargo tanks, shipboard incinerators, engine room ventilation in diesel ships, ventilation of cargo spaces where internal combustion engine vehicles may be driven, identification colours for ventilation systems, and thermosetting resin fiberglass pipe and fittings used in marine applications.

## SC6 Navigation (Japan)

Almost all draft ISO standards for navigational equipment under the deliberation of ISO/TC 8/SC 6, contain the feature of being compatible with the IMO's standards for the performance of navigational equipment, specified by the IMO/NAV (i.e. those given the number [IMO-link-NR]). The outline and the status of consideration are as follows:

Note: The standards assigned with the number of [IMO-link-NR] are those to be made compatible with IMO's counterparts.

**1.1 ISO/DIS 613 "Magnetic compasses, binnacles and azimuth reading devices - Class B" (Rev. of ISO 613:1982)**

This DIS is a draft amendment to an ISO standard for the performance of magnetic compasses, binnacles and azimuth reading devices, and its content is going to be amended to be compatible with the contents of ISO 449-1997: "Magnetic compasses and binnacles, class A". Japan is responsible for the preparation of the draft, and ISO/DIS 613 is scheduled to be circulated this autumn.

**1.2 ISO/CD 694 "Positioning of magnetic compasses in ships" (Rev. of ISO/R 694:1982)**

This standard specifies the requirements for the determination of fitting location of magnetic compasses to be equipped in ships to enable them to avoid magnetic interference caused by the magnetic field in the environment.

Germany is responsible for the preparation of the draft. ISO/CD 694 is scheduled to be circulated this autumn.

**1.3 ISO/CD 9875 "Marine echo-sounding equipment" (Rev. of ISO 9875:1997) [IMO-link-NR 06]**

This CD is a draft amendment to ISO 9875 which is a performance standard for marine echo-sounding equipment, and is prepared so as to make ISO 9875 compatible with the draft amendment to IMO Res.A.224 (VII)(NAV 43/WP.2/Add.1 Annex). In order to make the contents of IMO and ISO standards compatible, the amendment to ISO 9875 is made this time following the change of sounding distance of IMO's echo-sounding equipment from 400m to 200m. Japan is responsible for the preparation of the draft. The deadline date of the vote on IO/CD 9875 is 1998-10-17.

**1.4 ISO/CD 11606 "Marine electromagnetic compasses (Rev. of ISO 11606:1997) [IMO-link-NR 05]**

This CD is a draft amendment to ISO 11606 which specifies the performance and test for marine electromagnetic compasses. This draft amendment is made to enable ISO 11606 to be compatible with the IMO's draft now under consideration following IMO's adoption of ISO 11606 for small-craft-use radar plotting device. IMO/NAV's deliberation on IMO's performance standards for electromagnetic compasses is now under way. Therefore, the CD is being considered so as to make it compatible with IMO's performance standard. Japan is responsible for preparing the draft.

**1.5 ISO/CD 11674 "Heading control systems" (Rev. of ISO/TR 11674:1996) [IMO-link-NR 01]**

ISO/TR 11674:"Automatic pilots"(compatible with IMO's Res.A.342(IX)) needs to be amended, as IMO's Res.A.342(IX) has been amended. ISO/TC 8/SC 6 had proposed an amendment to IMO Res.A.342. On the basis of SC 6's proposal, IMO amended it and produced IMO Res.MSC. 64(67) Annex 3:"Heading control systems". It is necessary to make the ISO text compatible with the most recent IMO's performance standard (IMO Res.MSC.64(67)). Japan is responsible for preparing the draft. ISO/DIS 11674 is scheduled to be circulated this autumn.

This subject has been under consideration in the joint work with IEC/TC80. It will finally be published as ISO/IEC's joint standard.

**1.6 ISO/CD 16328 "Gyro-compasses for High Speed Craft" [IMO-link-NR 50]**

Under this item, it is intended to develop an ISO standard for the performance requirements for gyro-compasses which are required by the provisions of the international regulations for the safety of High Speed Craft, specified under Chapter X, SOLAS Convention, as amended in 1996. Japan is responsible for preparing the draft, and is now dealing with opinions on CD 16328 submitted by SC 6 members.

**1.7 ISO/CD 16329 "Automatic steering aids for High Speed Craft" [IMO-link-NR 49]**

Under this item, it is intended, as with the aforementioned gyro-compasses, to prepare an ISO standard for the performance requirements for automatic steering aids required by the provisions of the international regulations for the safety of High Speed Craft. Japan is responsible for preparing the draft, and is now dealing with opinions on CD 16329 submitted by SC 6 members.

**1.8 ISO/NP "Performance requirements for night vision equipment for High Speed Craft" [IMO-link-NR 40]**

Under this item, it is intended to prepare an ISO standard for the performance requirements for night vision equipment which is required by the provisions of international regulations for the safety of High Speed Craft - for providing them with increased visibility during night navigation. With this item put in the scope of SC 6, it is agreed to develop an ISO standard. Germany is responsible for preparing the draft text of the CD, and is now working on it.

Additionally, as the performance requirements for night vision equipment for High Speed Craft use are now under consideration by the IMO/NAV, it is intended to proceed a step further in considering the ISO draft, paying attention to the need of compatibility between IMO and ISO.

**SC8 Structures (Germany)**

During the last years a working group within ISO/TC8/SC8 has set up two standards: ISO 15401 "Bulk carriers - Hull structure - Construction quality" and ISO 15402 "Bulk carriers - Hull structure - Repair quality."

The balloting on these drafts has been recently completed and the publication of these as ISO standards will be carried out shortly. ISO/TC 8 received a mandate from IMO for the preparation of these standards. At the same time together with this mandate a much closer collaboration between IMO and ISO/TC 8 has been initiated. Meantime quite a number of items for common activities have been identified.

This year a second working group within SC 8 was created to tackle the subject "Ship's windows and side scuttles." The reason for taking up this topic was that: IMO has new requirements which will lead to a revision of the existing standards for ship's windows and to the preparation of an ISO standard for windows.

Furtheron, the sub-committee has started with the revision of four older ISO standards "ISO 3798, ISO 5778, ISO 5964 and ISO 6042" and has already finalized the FDIS versions for two of them (ISO 5778 and ISO 6042).

### **SC9 General Requirements (Japan)**

The outline and consideration status of the ISO drafts now within ISO/TC 8/SC 9's work list are as follows:

#### **2.1 ISO/WD 15016 "Assessment of speed and power performance by means of speed trials"**

The paper (WD 15106, prepared by Japan) was examined by SC 9/WG 2 members in advance. In order to deliberate how to deal with comments submitted at the time of the consideration of the paper, an SC 9/WG 2 meeting was held in Tokyo on 1998-06-23 and 24. As the result of the WG 2 meeting, it was agreed that the draft be considered next time as ISO/CD. Now the draft is being adjusted.

#### **2.2 ISO/NP "Standard practice for human engineering design for marine systems, equipment and facilities"**

Under this item it is intended to prepare an ISO standard which, from the human engineering view point, specifies necessary requirements regarding problematic points which require consideration to prevent human errors from being committed by seafarers at work onboard (e.g., size and arrangement of equipment, the dimensions of work space). Voting is now under preparation for allowing the subject item to become ISO/TC 8/SC 9's work item. The deadline date of the voting is scheduled to be November 1998. The United States is the proposer of the development of this ISO standard and is the drafting country.